

TIP TOP SOLUTION HR

Safety Data Sheet

according to the WHS Regulations

Issue date: 28/10/2005 Revision date: 02/02/2023 Supersedes: 26/02/2020 Version: 2.4

SDS No: 00156-0118



SECTION 1: Product identifier

1.1. GHS Product identifier

Product form : Mixture
Product name : TIP TOP SOLUTION HR
Product code : 515 9224, 515 9225, 515 9231

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Adhesive

1.4. Details of manufacturer or importer

Supplier

REMA TIP TOP AG
65 Gruber Strasse
Poing 85586
Germany
T +49 (0) 8121 / 707 - 100
info@tiptop.de

Importer

REMA TIP TOP Australia Pty Ltd.
3/20 Worth Street
Chullora NSW 2190
Australia
T +61 2 8755 8400
www.rema-tiptop.com.au

E-mail address of competent person responsible for the SDS: sds@gbk-ingelheim.de

1.5. Emergency phone number

Emergency number : +61-280735031, Infotrac/GBK GmbH-ID: 93591

SECTION 2: Hazard identification

2.1. Classification of the hazardous chemical

Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Flammable liquids, Category 2	H225
Serious eye damage/eye irritation, Category 2A	H319
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411

2.2. GHS Label elements, including precautionary statements

Hazard pictograms (GHS AU) :



Flame

Exclamation
mark

Environment

Signal word (GHS AU) :

Danger

Contains :

Ethyl acetate (< 65 %); Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 3% normal hexane (25 - 30 %); Other substances (not contributing to the classification of this product) (> 10 %)

Hazard statements (GHS AU) :

H225 - Highly flammable liquid and vapour
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
H411 - Toxic to aquatic life with long lasting effects

Precautionary statements (GHS AU) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
No smoking.
P233 - Keep container tightly closed.

TIP TOP SOLUTION HR

Safety Data Sheet

according to the WHS Regulations
SDS No: 00156-0118

P240 - Ground and bond container and receiving equipment.
P241 - Use explosion-proof electrical equipment.
P242 - Use non-sparking tools.
P243 - Take action to prevent static discharges.
P261 - Avoid breathing vapours.
P264 - Wash hands thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear eye protection, face protection, protective gloves, protective clothing.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 - Call a POISON CENTER, a doctor if you feel unwell.
P337+P313 - If eye irritation persists: Get medical attention.
P391 - Collect spillage.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Additional hazard statements (GHS AU) : AUH066 - Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : Vapours may form explosive mixture with air.

SECTION 3: Composition and information on ingredients

Comments : Preparation in organic solvents.

Name	CAS-No.	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
Ethyl acetate	141-78-6	< 65	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 3% normal hexane	92062-15-2	25 - 30	Flam. Liq. 2, H225 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Zinc oxide	1314-13-2	< 1	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Other substances (not contributing to the classification of this product)	-	> 10	Not classified

SECTION 4: First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : Take off immediately all contaminated clothing. In the event of persistent symptoms receive medical treatment. Move the affected person away from the contaminated area.

First-aid measures after inhalation : Move to fresh air in case of accidental inhalation of vapours or decomposition products. In the event of symptoms refer for medical treatment.

First-aid measures after skin contact : Wash off immediately with soap and plenty of water. If skin irritation occurs: Get medical advice/attention.

TIP TOP SOLUTION HR

Safety Data Sheet

according to the WHS Regulations
SDS No: 00156-0118

First-aid measures after eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult an eye specialist.
First-aid measures after ingestion	: Do not induce vomiting. Call a physician immediately. Do not induce vomiting without medical advice.

4.2. Symptoms caused by exposure

Symptoms/effects after inhalation	: May cause drowsiness or dizziness.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.

4.3. Medical attention and special treatment

Treatment	: Treat symptomatically.
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SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Foam. Water spray. Dry powder. Carbon dioxide.
Unsuitable extinguishing media	: high volume water jet.

5.2. Specific hazards arising from the chemical

Fire hazard	: Highly flammable liquid and vapour.
Explosion hazard	: Product is not explosive. Explosive vapour/air mixtures may be formed.
General measures	: In case of vapour formation use adequate respirator. Ensure adequate air ventilation. Evacuate personnel to a safe area. Remove ignition sources.
Hazardous decomposition products in case of fire	: In case of fire: dangerous decomposition products are formed. Carbon monoxide. Carbon dioxide.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Hazchem Code	: * 3YE
Other information	: Cool containers / tanks with spray water if possible. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations. The vapour/air mixture is explosive, even in empty, uncleaned receptacles.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: In case of vapour formation use adequate respirator. Ensure adequate air ventilation. Evacuate personnel to a safe area. Remove ignition sources.
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6.1.1. For non-emergency personnel

Protective equipment	: Wear proper protective equipment.
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6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment.
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6.2. Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3. Methods and materials for containment and cleaning up

For containment	: Dike and contain spill.
Methods for cleaning up	: Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Shovel or sweep up and put in a closed container for disposal.
Reference to other sections (13)	: Information for safe handling look up section 7. Information for personal protective equipment look up section 8. For further information refer to section 13.

TIP TOP SOLUTION HR

Safety Data Sheet

according to the WHS Regulations
SDS No: 00156-0118

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep container tightly closed. Vapours are heavier than air and may spread along floors. Provide local exhaust or general room ventilation. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not smoke. Take precautionary measures against static discharge. Use explosion-proof equipment.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Pay attention to explosion protection guidelines.
Storage conditions : Keep container tightly closed in a dry, cool and well-ventilated place.
Incompatible materials : Refer to Section 10 on Incompatible Materials.
Information on mixed storage : Keep away from food, drink and animal feeding stuffs.

SECTION 8: Exposure controls and personal protection

8.1. Control parameters - exposure standards

Ethyl acetate (141-78-6)	
Australia - Occupational Exposure Limits	
Local name	Ethyl acetate (Acetic acid ethyl ester; Acetic ester)
OES TWA [1]	720 mg/m ³
OES TWA [2]	200 ppm
OES STEL	1440 mg/m ³
OES STEL [ppm]	400 ppm
Regulatory reference	Workplace exposure standards for airborne contaminants (2022)
Zinc oxide (1314-13-2)	
Australia - Occupational Exposure Limits	
Local name	Zinc oxide
OES TWA [1]	5 mg/m ³ fume 10 mg/m ³ dust
OES STEL	10 mg/m ³ fume
Remark (AU)	Dust: (a) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.
Regulatory reference	Workplace exposure standards for airborne contaminants (2022)

8.2. Biological Monitoring

No additional information available

8.3. Engineering controls

Appropriate engineering controls : Pay attention to explosion protection guidelines. Ensure good ventilation of the work station.

8.4. Individual protection measures, such as personal protective equipment (PPE)

Hand protection : Splash protection. This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions. Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves

TIP TOP SOLUTION HR

Safety Data Sheet

according to the WHS Regulations
SDS No: 00156-0118

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Chemically resistant protective gloves	Butyl rubber	4 (> 120 minutes)	≥ 0.7		EN ISO 374

Eye protection : Eyewash bottle with clean water (EN 15154)

Type	Field of application	Characteristics	Standard
Protective goggles (EN 166)	Liquid splashes may occur		EN 166

Skin and body protection :

Type	Standard
Long sleeved protective clothing	EN ISO 6530

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition	Standard
Respiratory protective device with a gas filter	Type A - High-boiling (>65 °C) organic compounds		EN 14387

Other information : Do not breathe vapours. Wash hands before breaks and at the end of workday. Wash hands immediately after handling the product. Do not eat, drink or smoke when using this product. Treat subsequently with skin cream. Remove and wash contaminated clothing before re-use.

SECTION 9: Physical and chemical properties

Physical state	: Liquid
Appearance	: No data available
Colour	: Black
Odour	: Ester like
Odour threshold	: No data available
pH	: No data available
pH solution	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point / Freezing point	: Melting point: < -20 °C
Boiling point	: > 76 °C
Flash point	: -18 °C
Auto-ignition temperature	: 460 °C
Flammability (solid, gas)	: No data available
Vapour pressure	: Vapour pressure: Not determined
Relative density	: No data available
Density	: Density: 0.88 g/cm ³ @20°C
Solubility	: immiscible. at 20 °C.
Log Pow	: No data available
Viscosity, kinematic	: > 20.5 mm ² /s @ 40 °C
Viscosity, dynamic	: > 6000 mPa.s
Explosive properties	: No data available
Explosive limits	: No data available
Minimum ignition energy	: No data available
VOC content	: < 85 %
Fat solubility	: No data available
Additional information	: Solvent content < 85%

SECTION 10: Stability and reactivity

Reactivity	: No decomposition if stored normally. Highly flammable liquid and vapour.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Reactions with oxidizing agents.
Conditions to avoid	: Vapour/air-mixtures are explosive at intense warming. Heating can release vapours which can be ignited. To avoid thermal decomposition, do not overheat.

TIP TOP SOLUTION HR

Safety Data Sheet

according to the WHS Regulations
SDS No: 00156-0118

Incompatible materials : Oxidizing agent. Nitrous acid and other nitrosating agents.
Hazardous decomposition products : An inappropriate handling, for instance major amounts of product combined with strong heat and nitrosating agents, renders possible a cleavage of nitrosamines in traces. Thermal decomposition generates : Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Ethyl acetate (141-78-6)	
LD50 oral rat	4935 mg/kg
LC50 Inhalation - Rat	1600 mg/l/4h

Zinc oxide (1314-13-2)	
LD50 oral rat	> 5000 mg/kg (OECD 401 method)
LD50 oral	5000 mg/kg
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402 method)
LD50 dermal	5000 mg/kg
LC50 Inhalation - Rat	> 5.7 mg/l/4h
LC50 Inhalation - Rat (Dust/Mist)	5.7 mg/l/4h

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : May cause drowsiness or dizziness.

Ethyl acetate (141-78-6)	
STOT-single exposure	May cause drowsiness or dizziness.

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 3% normal hexane (92062-15-2)	
STOT-single exposure	May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified
Aspiration hazard : Not classified.

Ethyl acetate (141-78-6)	
Animal studies and expert judgment for classification	False

Zinc oxide (1314-13-2)	
Animal studies and expert judgment for classification	False

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 3% normal hexane (92062-15-2)	
Animal studies and expert judgment for classification	False

Other substances (not contributing to the classification of this product)	
Animal studies and expert judgment for classification	False

Potential adverse human health effects and symptoms : High concentration of vapours may induce: headache, nausea, dizziness. Irritation of mucous membranes. Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product
Other information : An inappropriate handling, for instance major amounts of product combined with strong heat and nitrosating agents, renders possible a cleavage of nitrosamines in traces

TIP TOP SOLUTION HR

Safety Data Sheet

according to the WHS Regulations
SDS No: 00156-0118

SECTION 12: Ecological information

12.1. Ecotoxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.
Other information : Do not flush into surface water or sewer system.

Ethyl acetate (141-78-6)

LC50 fish 1	> 100 mg/l
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12.2. Persistence and degradability

TIP TOP SOLUTION HR

Persistence and degradability	No data available.
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Zinc oxide (1314-13-2)

Not rapidly degradable	
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Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 3% normal hexane (92062-15-2)

Not rapidly degradable	
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12.3. Bioaccumulative potential

TIP TOP SOLUTION HR

Bioaccumulative potential	No data available.
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12.4. Mobility in soil

TIP TOP SOLUTION HR

Ecology - soil	No data available.
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12.5. Other adverse effects

Ozone : Not classified
Other adverse effects : Significantly hazardous to water.

TIP TOP SOLUTION HR

Fluorinated greenhouse gases	False
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Ethyl acetate (141-78-6)

Fluorinated greenhouse gases	False
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Zinc oxide (1314-13-2)

Fluorinated greenhouse gases	False
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Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 3% normal hexane (92062-15-2)

Fluorinated greenhouse gases	False
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Other substances (not contributing to the classification of this product)

Fluorinated greenhouse gases	False
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TIP TOP SOLUTION HR

Safety Data Sheet

according to the WHS Regulations
SDS No: 00156-0118

SECTION 13: Disposal considerations

Waste treatment methods	: Recycling is preferred to disposal or incineration. Can be incinerated according to local regulations.
Product/Packaging disposal recommendations	: Packaging that cannot be cleaned should be disposed of like the product. Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse. Empty containers should be taken for local recycling, recovery or waste disposal.

SECTION 14: Transport information

14.1. UN number

UN-No. (ADG)	: 1133
UN-No. (IMDG)	: 1133
UN-No. (IATA)	: 1133

14.2. UN Proper Shipping Name

Proper Shipping Name (ADG)	: ADHESIVES
Proper Shipping Name (IMDG)	: ADHESIVES (Solvent naphtha (petroleum))
Proper Shipping Name (IATA)	: Adhesives

14.3. Transport hazard class(es)

ADG

Transport hazard class(es) (ADG)	: 3
Danger labels (ADG)	: 3



IMDG

Transport hazard class(es) (IMDG)	: 3
Danger labels (IMDG)	: 3



IATA

Transport hazard class(es) (IATA)	: 3
Danger labels (IATA)	: 3



14.4. Packing group

Packing group (ADG)	: II - Substances presenting medium danger
Packing group (IMDG)	: II
Packing group (IATA)	: II

14.5. Environmental hazards

Marine pollutant	: Yes
Dangerous for the environment	: Yes
Other information	: No supplementary information available

TIP TOP SOLUTION HR

Safety Data Sheet

according to the WHS Regulations
SDS No: 00156-0118

14.6. Special precautions for user

Specific storage requirement : No data available
Shock sensitivity : No data available

14.7. Additional information

Other information : No supplementary information available

Transport by road and rail

UN-No. (ADG) : 1133
Limited quantities (ADG) : 5l
Excepted quantities (ADG) : E2
Packing instructions (ADG) : P001, IBC02
Special packing provisions (ADG) : PP1
Portable tank and bulk container instructions (ADG) : T4
Portable tank and bulk container special provisions (ADG) : TP1, TP8

Transport by sea

UN-No. (IMDG) : 1133
Transport regulations (IMDG) : Transport in accordance with section 2.3.2.5 of the IMDG (viscous substance) may be applied
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
Special packing provisions (IMDG) : PP1
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP1, TP8
EmS-No. (Fire) : F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage) : S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS
Stowage category (IMDG) : B

Air transport

UN-No. (IATA) : 1133
PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity (IATA) : 1L
PCA packing instructions (IATA) : 353
PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L
Special provisions (IATA) : A3
ERG code (IATA) : 3L

14.8. Hazchem or Emergency Action Code

Hazchem Code : * 3YE

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

Australian Industrial Chemicals Introduction Scheme (AICIS)

Australian Inventory of Industrial Chemicals (AICIS Inventory) status : All components of this mixture are listed on or exempted from AICIS

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Relevant Poisons Schedule number : Labelling requirements for SUSMP do not apply to a poison that is packed and sold solely for industrial, laboratory or manufacturing use. However, this product is labelled in accordance with the Safe Work Australia "Code of Practice" for workplace substances.

TIP TOP SOLUTION HR

Safety Data Sheet

according to the WHS Regulations
SDS No: 00156-0118

15.2. International agreements

No additional information available

SECTION 16: Other information

- Abbreviations and acronyms : ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
IATA - International Air Transport Association
IMDG - International Maritime Dangerous Goods
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
DOT - Department of Transport
TDG - Transportation of Dangerous Goods
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
GHS - Globally Harmonized System of Classification, Labelling and Packaging of Chemicals
IARC - International Agency for Research on Cancer
vPvB - Very Persistent and Very Bioaccumulative
PBT - Persistent Bioaccumulative Toxic
PNEC - Predicted No-Effect Concentration
CAS - CAS (Chemical Abstracts Service) number
IBC-Code - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ATE - Acute Toxicity Estimate
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
BCF - Bioconcentration factor
MARPOL 73/78 - MARPOL 73/78: International Convention for the Prevention of Pollution From Ships
ADG - Transport of Australian Dangerous Goods
- Revision date : 2/02/2023
- Other information : Data of sections 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities. The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge. The delivery specifications are contained in the corresponding product sheet. This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

Classification	
Flam. Liq. 2	H225
Eye Irrit. 2A	H319
STOT SE 3	H336
Aquatic Chronic 2	H411

Full text of H-statements	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Flam. Liq. 2	Flammable liquids, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

TIP TOP SOLUTION HR

Safety Data Sheet

according to the WHS Regulations
SDS No: 00156-0118

Full text of H-statements	
H225	Highly flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects